

REMARKS

This Response, filed in reply to the Office Action dated March 2, 2007, is believed to be fully responsive to each point of objection and rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested. Claims 1, 3, 7 and 12 have been amended and entry of these amendments is respectfully requested. Claims 2, 4, 5, 9-11, 13-18 and 33 have been canceled and new claims 45 and 46 have been added. After entry of the amendments, Claims 1, 3, 6-8, 12, 19-32, and 34-46 will be pending in the application.

Claim Rejections - 35 U.S.C. § 103

Claims 1-7, 9-35, 37, 38 and 40-44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Alcala *et al.* (U.S. Patent No. 5,127, 405) in view of Lakowicz *et al.* (U.S. Patent No. 6,197,534).

The Office Action alleges that it would have been obvious for one of ordinary skill in the art to modify the optical system of Alcala *et al.* to measure luminescence intensity, polarization, and the energy transfer efficiency of the reporter group, as disclosed by Lakowicz *et al.*, in order to detect glucose binding. Further, the Office Action alleges that it would have been obvious for one of ordinary skill in the art to modify the sensing system of Alcala *et al.* to utilize either a pair of organic dyes, a pair of fusion proteins, or an organic dye and a fusion protein, as disclosed by Lakowicz *et al.*, since glucose concentration can be measured due to a change in the energy transfer efficiency of the reporter group upon glucose binding.

To further define Applicants intended invention, Applicants hereby voluntarily amend Claims 1, 3, 7 and 12 and cancel Claims 2, 4, 5, 9-11, 13-18 and 33. Applicants assert that the amendments to the claims render moot the outstanding obviousness rejections, because the cited art fails to teach each and every element of the presently claimed invention. Specifically, the cited references failed to teach “a tip that houses and protects said optical conduit and said sensing element within said tip.”

Claims 36 and 39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Alcala *et al.* (U.S. Patent No. 5,127, 405) in view of Lakowicz *et al.* (U.S. Patent No. 6,197,534), and further in view of Darrow *et al.* (U.S. Patent Application No. 2002/0043651).

The Office Action alleges that it would have been obvious for one of ordinary skill in the art to modify the sensing system of Alcala *et al.* according to the method of Lakowicz *et al.* to include a reference fluorophore having excitation and emission wavelengths similar to the fluorophore of interest, since it would minimize instrumental errors. The Office Action alleges that the sensing element discussed in Example 5 of Lakowicz *et al.* uses the phase-modulation method discussed in Darrow *et al.*

Applicants maintain the amendments to Claims 1, 3, 7 and 12 attached herein, and the cancellation of Claims 2, 4, 5, 9-11, 13-18 and 33, render moot the outstanding obviousness rejections, because the cited art fails to teach each and every element of the presently claimed invention. Specifically, the cited references failed to teach “a tip that houses and protects said optical conduit and said sensing element within said tip.”

Accordingly, withdrawal of the rejection is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

/Todd B. Buck/

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